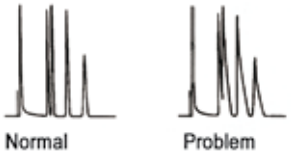
Liner Troubleshooting

Symptom	Possible Cause	Remedy
Tailing Peaks 	Sample components adsorbed by column inlet liner or contaminated gold inlet seal.	Use new, deactivated liner or clean old liner and replace glass wool.
	Needle hitting and breaking packing in inlet liner.	Partially remove packing from liner or use without packing.
	Column end poorly cut (sample absorption).	Remove column. Make a clean, square cut using a reliable capillary fused silica cutting tool (such as a ceramic wafer or the Agilent Column Cutter), then reinstall column.
	Broken or chipped inlet liner.	
		Make sure total flow in inlet is above 40 mL /min.
Baseline Rise Before or After Peak 	Sample decomposing.	Remove inlet liner and check cleanliness. Use new, deactivated liner or replace glass wool and packing. Column /sample residues could also be the problem.
Baseline Change After Large Peak 	Column and inlet liner mis-aligned.	Check installation of column end and inlet See also "Septum Troubleshooting", liner ; adjust if necessary.
Unresolved Peaks 	Column or inlet liner contaminated or column deteriorating.	Use a guard column to prolong column life. Remove inlet liner and check cleanliness. Use new, deactivated liner or replace glass wool and packing. Trim the front end of the column a minimum of 6 inches

How to minimize problems

Change liners on a regular basis determined by :

- Previous use pattern
- Sample cleanliness
- Chromatographic abnormalities such as :
  - . Peak shape changes
  - . Peak discrimination
  - . Poor reproducibility
  - . Sample pyrolysis
  - . Active analyte response loss or decomposition